Meeting Description: Michigan Geographic Framework Users Meeting
Date: August 1, 2002 **Time:** 10:00 a.m.
Location: Michigan Center for Geographic Information, George W. Romney Building, 10th Floor, Conference Room

I. Approval of July Meeting Minutes

When approved, the minutes will be posted on www.michigan.gov/cgi click on Outreach & Promotion, MI Geographic Information Users Forum, Meeting Minutes.

II. Geographic Framework Program

A. Version 2 Delivery

Rob Surber, Center for Geographic Information (CGI), reported that CGI is delivering Version 2 of framework. Currently there are E00 files available for FTP or putting on a CD for distribution. CGI will send copies to Gordon Rector, U.S. Bureau of the Census, and also a couple of copies to Washington, D.C. CGI is creating a shape file and it will be available on the web in a couple weeks.

Gordon Rector, U.S. Bureau of the Census, stated that they would like shape files on CD.

Rob Surber, CGI, added that they do have metadata available for shape files – by theme and are finalizing.

Everett Root, CGI, asked Bill Enslin, MSU, CGI is talking about adding functional class and legal system to road layer would cause problems for MSU? Some features will be blank.

Bill Enslin, MSU, indicated that would be fine and asked since CGI is providing MDOT road layers and bridges could it be distributed to others as part of Map Image Viewer

Everett Root, CGI, commented that it is not part of set on the web.

Rob Surber, CGI, indicated that it doesn't have to be exactly the same. It is a matter of priorities when to put things out on the web.

Joyce Newell, MDOT, commented that MDOT has to do a thorough statewide edit on the bridges.

Bill Enslin, MSU, added that MSU needs MDOT layer for road intersections also.

Everett Root, CGI, commented that MDOT road layer has full framework structure in a shape file format.

B. Act 51 Reconciliation Update

Rob Surber, CGI, reported CGI is fully running on road layer reconciliation with the Act 51 maps. Michigan State Industries (MSI) is providing scanned images on a flow basis that meets CGI's schedule. Two counties are done to the point of quality control. There are a few quality control programs that are being finalized. There was a discussion on Federal Aide Urban Boundaries that takes the Census Urban Boundaries and CGI is trying to coordinate.

Joyce Newell, MDOT, stated that Federal Aid Urban Boundaries have to do more with transportation. It determines whether a road is considered rural or urban for funding. Act 51 uses it as well for federal funding. Must start with census boundaries and expand beyond that whatever makes sense beyond urban boundaries. MDOT works with Metropolitan Planning Organizations or county-level people to submit to Federal Highway Administration (FHWA).

Rob Surber, CGI, distributed an example showing the difference between the Census Urban Boundary and the Federal Aid Urban Boundary.

Joyce Newell, MDOT, added that these maps have gone out to counties that have an urban area. Asking to have the results returned by February/March at the latest. Then it will go to FHWA for their approval. After approval CGI will incorporate on a flow basis.

Rob Surber, CGI, commented that there are guidelines for incorporating into framework.

Joyce Newell, MDOT, added that once boundaries are in place, it will impact National Classification of roads in or outside the boundaries.

Rob Surber, CGI, stated that there are funding implications.

C. Digital Ortho Update

Sherm Hollander, MDNR, distributed status maps of digital orthophoto quadrangles (DOQs) available for the state. The 1998 Series color infrared coverage has been added to the web site for the counties of Delta (entire), Alger (all but Laughing Fish Point), Chippewa (all but column of quads along west boundary), Mackinac (east half), Cass (all but column of quads along east boundary), and Berrien (entire). Production work is in-progress for the 1998 Series DOQs for Ontonagon, Gogebic, Marquette, and Luce Counties. Full coverage of the Upper Peninsula in the 1998 Series is expected to be available by the end of the year. Production work is also in progress that will complete 1998 Series coverage of Emmet, Cheboygan, Charlevoix, and Roscommon Counties. The 1998 Series DOQs being produced by U.S. Forest Service (USFS) for the national forests in Michigan are based on mosaics rather than the standard single image. Seam lines are visible in varying degrees. Concerns about the quality of the mosaic work have been forwarded to USGS. Work continues to bring 1992 Series DOQ coverage up to MDNR archive standards. Revision work was completed for the counties of Grand Traverse, Wexford, Crawford, Lake, and Mason.

D. National Hydrology Dataset (NHD) Update

Rob Surber, CGI, reported that United States Forest Service (USFS) sent information about the repositioned line work for a watershed that Michigan shares with Wisconsin. That information was done at CGI and sent as input for USFS process. Steve Miller, Michigan Department of Environmental Quality (MDEQ), attended a session at the ESRI Users Conference about tool development and geo database.

Steve Miller, MDEQ, attended a pre-conference workshop that was put on by the University of Texas. They have a new book available from ESRI about arc hydro database. This is an excellent book. It has a CD that has a geo database for the entire United States. Some tools ESRI is developing with University of Texas and a consortium of people is available from the ESRI website. The United States Geological Survey (USGS) is proposing to bring a version of NHD in as a geo database. However, the development of high resolution will still be done with an ArcINFO model coverages. The transition of two will be difficult. Also attended National Hydro Dataset (NHD) work session and lot of people are struggling with high-resolution data. USFS is working with a contractor to cover some Wisconsin watersheds. The Michigan Department of Natural Resources (MDNR), Fisheries Institute, is continuing to work on 12 watersheds. They spent 9 months doing pre-conflation on 2 watersheds. A lot of time was spent on working out tools to convert USFS format and also did conversion tools for framework. It is obviously a complex task. When get to point of reposition and look at, can build hydrography network and can address a lot of issues that they had. When touching line work and can eliminate probably 80% of pre-conflation work. Has been the hope all along to touch the line work before repositioning before NHD. This has been a very useful learning process. Will be working with the Fisheries Institute to learn what they have done. In October they are starting to look at NHD development at CGI.

Rob Surber, CGI, added that an innovative partnership (IP) proposal was submitted to USGS to help fund this work over the next 3 years. The state will contribute a lot to this effort in the area of repositioning to create a good base line work layer. According to proposal, the USGS would provide funding for actual NHD conflation work. CGI would also coordinate work with the USFS areas to bring together with CGI's work to make one consistent product. Another part of the proposal is to look at even higher resolution information that may come from other groups and how to capture and integrate. Users want to be able to drill down to the local res. Recognize

the importance of not only a statewide consistent high-res., but there is a great need to have local res. available for certain areas. Want to look at this process and also of transactional updates. USGS is reviewing the proposal.

Steve Miller, MDEQ, added that there was good feedback. All states are struggling with local stewardship issues. Oakland County is ready to develop super high-resolution NHD. Watersheds don't stop at county boundaries, therefore the need to come up with a consistent statewide product. From the national level, they are looking across state lines to come up with a national product.

E. Crash System Rewrite Update

Rob Surber, CGI, reported that he has attended requirement analysis sessions for the complete rewrite of the Crash System. One of the users of framework is the crash location process. They have $2 million from seat belt money that is going to rewrite Michigan Accident Location Inventory (MALI). There are about 400,000 crashes every year. The most useful thing is to know where the crashes occur. 25% of the accident forms have information that can not be located on framework. Looking at how to better design the system. Global Position System (GPS) is one option, but it is hard to change the officers thinking to have them use new equipment. They are working toward using a more automated way to collect the information. Looking for a better feedback system if something doesn't match to framework. Now a paper form is used by all police officers.

III. Michigan Department of Natural Resources (MDNR) Projects and Activities

Sherm Hollander, MDNR, has nothing to add.

IV. Michigan Department of Transportation (MDOT) Projects and Activities

Joyce Newell, MDOT, reported that they had contact with each of the 3 federal forest in Michigan about their federal roads. MDOT reports federal roads as part of the highway performance system. For these roads, MDOT get mileage for the roads that are open to public and report it to the federal government. Each area will send a digital file in a GIS format to MDOT. They may be in framework, but not tagged as federal forest roads. The Transportation Commission is meeting soon and MDOT expects that the Asset Management Council will be appointed as outlined in the Asset Management Bill. They are confident it will mean the use of framework for collecting information about roads.

V. Michigan Department of Environmental Quality (MDEQ) Projects and Activities

Steve Miller, MDEQ, reported that he attended the ESRI User Conference, which did not have a large Michigan representation. The ESRI presentations better designed to show what is available now in 8.2 and what is going to be available with 8.3. The ArcREADER format will be valuable tool. It is the equavilant to the Acrobat Reader. It gives the end user a lot of capabilities. Couple of years ago ESRI did a 'highlights' of the conference for Michigan users and Steve is working on making arrangements for that again this year.

VI. Michigan State Police (MSP) Projects and Activities

Eric Nischan, CGI, reported the one of the Federal Emergency Management Agency requirements through the state hazard migration plan is a mapping requirement. MSP is using the Map Image Viewer. Will get some CDs rolled out soon. Part of this will entail geocoding 3,000+ Sierra Title 3 Section 302 sites (extremely hazardous material) under the Community Right to Know Act. When done with quality control, there will be data site that might be of interest. MSP plans to coordinate with framework for their nuclear power plant drill. They will

be coordinating with Wayne County Emergency Management using an ArcIMS service and the framework data.

VII. Michigan State Industries (MSI) Projects and Activities

Scott Hodge, MSI, reported the Physical Reference (PR) Finder project is on schedule to complete 1st week of September. The Act 51 Mileage Project is pretty well complete - should have last of CDs in mail next week. MSI has done development work with MDOT for the 'As Built' Project and things look good.

Rob Surber, CGI, stated that CGI has had good success with images. The registered Act 51 maps might be a good product in themselves.

VIII. CGI Projects and Activities

Carolyn Lauer, CGI, reported that they are updating and maintaining the CGI web site. Looking forward to establishing collaborative relationships with other department to help keep maintenance up to date. The CMA is working well. Hoping that the new server will mean more timely cache outs.

Rob Surber, CGI, commented that if anybody has questions or advice about the web site, please let CGI know. The site is still in development. Also advise CGI of upcoming events and they will put it on the web site.

IX. MSU Center for Remote Sensing and GIS Projects and Activities

Bill Enslin, MSU, reported that they have offered position to Justin Booth, CGI, to replace Tracey Aichele. The position has been redefined the Geographic Information Systems (GIS) processing part of the job. Justin will be more involved with training, developing materials for the Map Image Viewer, and interfacing with other departments in state government. MSU put together a program for Family Independence Agency (FIA) to develop a process to populate all their records in the Terra warehouse with coordinates. Some functionality was added to the viewer to take extracts in excel format to convert to shape files. They have had an ArcIMS application to provide on a monthly basis each county FIA office a glimpse of what their clients look like. That has been hand downloaded through ArcVIEW. MSU created a stand-alone DLL application that takes all the files in the directory and converts them to shape files. This will allow FIA to refresh county data files more frequently. FIA is testing it now. FIA is in discussion with ESRI to get ArcSDE, which would make it easier. The long-term objective of MSU is to create CD creations to automate extractions of geography from county or statewide files to create datasets for custom regions. MSU put together a Visual Basic map option that will take one or more regional polygon, go through multi-county file, clip them and redo polygon building. It will also recalculating and rescale fields of clipped polygons. It is all table driven. There are 50 fields that it is working on - rescaling linear measurement area and also recalculates the to-and-from addresses. Want feedback. Soon will run through Version 2 and will it get integrated into CD production process. Then when an order comes in, everything can be clipped to geography and matched. Also started a tool that allows users to select Type 2 water supplies. Once selected, the program locates records and creates radius circle around wells and zooms to that extent.

Steve Miller, MDEQ, added that he will be demonstrating this to Region 5 states. This is a way to put in the hands of counties if they need it. The Viewer has the strength to be customized. The PDF version of the Source Water Assessments that will come up when the data file is brought up. The Surface Water Quality Division can clip a watershed and bring in region numbers and factors that they need.

Bill Enslin, MSU, added that they have completed the highway shield layer for the Viewer. The symbols are a fixed size with a scale threshold. Based on feedback, may need to change. They are revisiting the Metadata issue. Some is very cryptic. They looked at style sheets for XML, that ESRI uses, and it looks good. Now will have to find out if there is proprietary use since MSU is using ESRI's style sheet.

X. County / Local Projects and Activities

Nobody is attendance.

XI. Regional Projects and Activities

Abbigail Mueller, West Michigan Regional Planning Commission (WMRPC), reported that they are plugging away at Ottawa County. The Army Corps of Engineers is updating their stuff and it was not clean enough to pass on for her use. Abbi plans to move to Allegan County next. WMRPC might start working on Big Rapids Township's Master Plan.

XII. Federal Projects and Activities

Gordon Rector, US Bureau of the Census, reported that they are doing a test on automated listing software which allows field people to pull up TIGER on a laptop when out in the field. They have a list of addresses that come from the post office for new mail delivery points that are not currently coded in TIGER. That gets fed back to office and TIGER will get updated. This is part of American Community Survey to collect data, that will take the place of long form data, every 10 years. The test will be in Lake County in Michigan. Eventually every field representative will do this work.

Rob Surber, CGI, asked if updating TIGER has not been part of the field reps responsibility.

Gordon Rector, Census Bureau, responded that some times they had paper copies of TIGER maps. That is how things got out of position because they are not cartographers. The Census Bureau starting receiving a file from the post office in the mid-1990s. In the office they would try to find addresses and the Census Bureau would contact the local governments. This is a new way to look for them in the field.

Rob Surber, CGI, asked if they come with any more geographic identification.

Gordon Rector, Census Bureau, responded that they get address with the zip code and try to code into TIGER. If they don't code, they go to the local mail carrier and ask where the address is.

Rob Surber, CGI, asked if there is a chance this could be farmed out.

Gordon Rector, Census Bureau, responded that the field rep has to go out into communities to take survey. The Census Bureau cannot give out the individual addresses.

Steve Miller, MDEQ, added that this information is helpful to MDEQ.

Bill Enslin, MSU, asked Gordon Rector how many states have framework data that may become part of TIGER next census.

Gordon Rector, Census Bureau, stated that he is only aware of Michigan. There may be less than half dozen others.

Rob Surber, CGI, added that to his knowledge there is a not a complete road network. A lot of states have a complete trunkline in GIS form. There are probably some efforts that can provide some input to the process.

Gordon Rector, Census Bureau, added that they just finished a phone survey of every county in Ohio and West Virginia. They were looking for a countywide street centerline file. Ohio had about 1/3 of counties that have it. Michigan is very unique in what they have.

XIII. Other Issues

None.

XIV. Next Meeting Date

September 5, 2002, 10 a.m. until 12 p.m., Michigan Center for Geographic Information, George W. Romney Building, 111 S. Capitol, 10th Floor, Lansing, MI 48933